

ABSTRACT OF THE DISCLOSURE

A method of fabricating a photocrystalline plastic optical fiber comprises, for fabricating the
5 cladding, a step of forming a flow by simultaneously
injecting a liquid first composition that is a precursor
of the cladding polymer and curable by ultraviolet
radiation into a first series of holes in an injection
plate, and a second composition that is unreactive to the
10 ultraviolet radiation and is selected from a liquid
composition and a gas composition into a second series of
holes in the plate. The second series of holes have a
substantially periodic distribution and each of the holes
of the second series has as its closest neighbors holes
15 of the first series. The method further includes a step
of irradiating the flow with ultraviolet radiation to
form the photocrystalline plastic optical fiber.